



AgConnections

AGRICULTURAL SAFETY AND HEALTH

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NIOSH Agricultural Research Centers Update for Summer 2005

Natural Partners

Bradley Rein
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and Technology
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and Service

Biotechnology and international competition are changing agricultural production systems in the U.S. These changes will have significant impact on the health and safety of those who produce our food and fiber. Agricultural production in the U.S. has been historically recognized as one of the most hazardous of all industrial categories. Even the conservative estimates of the cost of farm related fatalities, injuries, and disease suggest that the agricultural safety and health problem is a \$5.0 billion issue. Currently, U.S. agricultural production is based on heavy use of chemical inputs (pesticides, herbicides and fertilizer) for most crops and low cost/high injury risk labor for most high value horticultural crops. In the future, there will be more genetically modified organisms and high speed automated equipment. While these technologies help to assure U.S. competitiveness in the world marketplace, they also have the potential to reduce exposure to some hazards while introducing new problems associated with high tech production systems.

Documenting and analyzing the emerging trends and technologies and studying how they will positively or negatively impact agricultural safety and health is an essential

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Partnering With Extension Increases Outreach Efforts

One of the primary partners in outreach and prevention activities of the Great Lakes Center for Agricultural Safety and Health (GLCASH) has been the Ohio Extension Service. During the last United States Department of Agriculture (USDA) funding cycle the USDA eliminated the funding for the Extension Farm Safety line item. Reducing extension funding is detrimental because agriculture is one of the most hazardous occupations in America. Also, due to the geographically dispersed nature and complexity of health and safety issues facing American farms today, budget cuts only hinder the progress of the agricultural health and safety movement. As the old saying goes, it takes a village to raise a child and the agricultural safety and health field (although much progress has been made) is still in its infancy. Because of the Extension Service's extensive network in virtually every county in the United States, it is vital that we, as Agricultural Centers, continue to support any future Extension funding efforts at the national level. This is important because Extension provides us with intimate access to farming audiences for research purposes, assistance with our research to practice (R2P) program, and outreach, prevention, and educational efforts.

Outreach, education, intervention and prevention activities are an important part of the everyday business of the NIOSH Agricultural Safety and Health Centers. GLCASH, as part of an active partnership with the Ohio State University Extension, has recently supported train-the-trainer

programs for the Hazardous Occupations Safety Training in Agriculture (HOSTA) project in Ohio. The HOSTA Program is a national CREES-USDA funded project that supports the Hazardous Occupations Order in Agriculture law that requires that any individual who is 14 – 15 years of age and is employed on a farm that is not their home or family farm must be trained on the safe operation

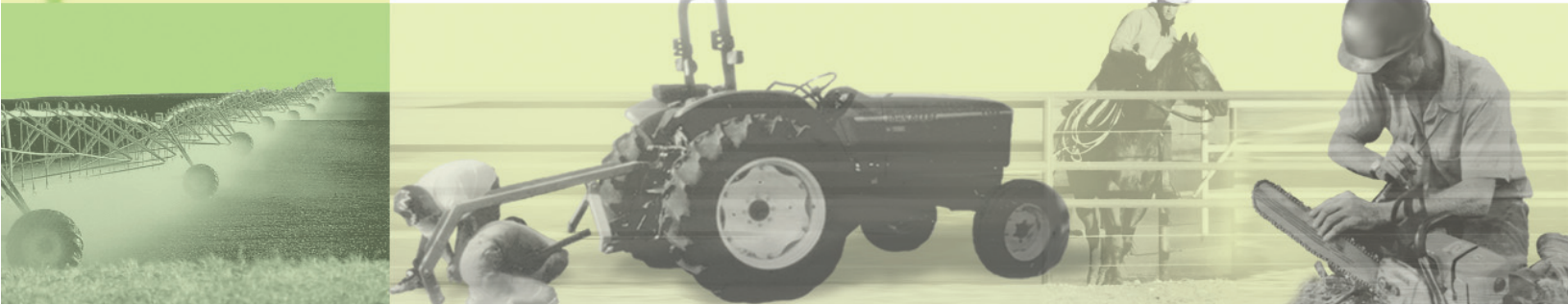


Tom Bean, Ed.D.
Great Lakes Center Director

of tractors, farm machinery and other hazardous activities in the agricultural industry. Eight regional sessions were conducted around Ohio between November 2004 and January 2005. Over 100 participants attended the training (a third of the participants were Extension Agents, the remaining were secondary school agricultural teachers and community volunteers) and they are now teaching the tractor certification program to youth in their communities. Future outreach efforts are being planned to support HOSTA instructor trainings in the states served by GLCASH. States received initial State Master Trainings by the HOSTA project, sponsored by CSREES-USDA. However, individual states may need additional support to adequately implement the training to their local instructors.

As a result of our completed research project that utilized Extension's Pesticide Applicators Training Program, outreach efforts are underway for planning a R2P project. The project will be a national skin cancer train-the-trainer prevention program. GLCASH Outreach Director Dee Jepsen will conduct a training session to interested Extension and Farm Bureau colleagues around the

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The Migrant Clinician Occupational Health Reference Manual

Susan Akerman, Northeast Center

In 1999, Northeast Center researchers discovered that a significant proportion (15%) of farmworker visits to migrant clinics being studied were work-related. Medical care provider surveys have also shown interest in occupational health training, geared towards farmworker patients. In response to this identified need, the Northeast Center has developed the Migrant Clinician Occupational Health Reference Manual.

Interviews with migrant clinicians throughout the Northeast have led to a highly visual format with minimal text, and an emphasis on epidemiologic data on northeastern farmworker injury and occupational illness collected through previous NEC research.

The manual provides instruction on taking an occupational history, cultural competency, commodity profiles, demographic profiles of different worker populations, diagnosis and treatment, patient education (in multiple languages), and Workers' Compensation. The completed manual has been reviewed by migrant health specialists, and is currently being piloted at three federally funded migrant health centers in the Northeast. After further revisions based upon the pilot testing, the planned release date for the final manual is summer of 2006. Contact: sackerman@nycamh.com

Regional Education through State Extension Safety Agents

Darla Borges, Hi-CAHS Center

A major challenge to agricultural health and safety outreach in the high plains intermountain region is the diversity of operations and the long distances between communities. Education/outreach utilizing state extension agents addresses these issues by increasing collaboration between HICAHS and established networks of extension safety specialists in the six state region. This integrated system consisting of university researchers, county extension agents, and extension specialists who link researchers to the county agents is instrumental in the innovation-development process as well as the dissemination of educational materials. During the past year, we recognized the need to expand our partnership base in order to provide greater dissemination of agricultural related health and safety information. Thus, we established new partnerships with agricultural associations, private enterprises, and insurance carriers in the state of Colorado. We propose to continue developing existing partnerships and establish new partners with other associations and private enterprise throughout Region VIII. Contact: Darla Borgas (970) 491-1912.

Outreach and Education in the Northwest

Helen Murphy, PNASH Center

PNASH's Communication and Education Project provides an essential link between our research and the many stakeholders we serve. Major upcoming educational events PNASH will co-sponsor include the Western Migrant Stream Forum; Washington Governor's Agricultural Safety Day; a conference on sustainable agriculture; and the 2006 Western Regional Conference focusing on research to practice.

Two of PNASH's newly funded outreach projects will provide information on the health risks of organophosphate (OP) pesticides. Health care professionals dealing with children and the neurodevelopmental effects of OP pesticides are one target audience. A related project will focus on communicating the health risks of pesticides to farmers, farm workers, and their families.

Contact: Helen Murphy, hmurf@u.washington.edu, (206) 616-5906.



Mini-grant Awards Extends Outreach

SW Center

Mini-grants have been awarded by the SW Center to expand outreach for the dissemination of agricultural safety and health information to key populations.

FFA students will use SW Center developed materials to prepare presentations on livestock safety and deliver his/her presentation several times to various youth, civic, and agricultural groups.

Cyber Voices from the Field is a project to teach migrant farm workers and family members how to locate and use public email so they can maintain contact during the work season. Contact: agcenter@uthct.edu

AgHealth E-mail Listserver Available

Western Center

Among its many electronic communications, the Western Center for Agricultural Health and Safety has an e-mail list server called "aghealth." It is open to anyone interested in agricultural health and safety.

Some appropriate topics for posting on the aghealth list server include:

- Questions regarding all aspects of ag health and safety.
- Research and findings related to ag health and safety.
- Seminars and other events of interest to ag health and safety professionals worldwide.
- New programs relating to ag health and safety.
- URLs (web addresses) for ag health and safety-related home pages.

To subscribe to the aghealth listserv, go to the [aghealth list information page](#). Please use the web link in the e-mail to confirm.



8,000 Nurses Needed in Agricultural Health

Deb Reed, SE Center

The number of nurses across the United States with expertise in agricultural health nursing is unknown, yet as many as 8,000 are needed. Nurses in the southern United States serve over 541,000 farm families, over a quarter of the nation's agricultural population. The intent of this project is to provide multiple venues for learning about agricultural health and safety in a cost and time effective manner and encourage local stakeholders (nurse educators, researchers, and nursing students) to adapt and develop content that is culturally suited for their areas.

A baseline survey was conducted in 2003 to establish current focus on agricultural issues within nursing instruction. A 15-item survey was mailed to 185 nursing schools located within 13 southern states. Information was requested about undergraduate and graduate curricula that included information about agricultural health and safety. Surveys were returned from 113 programs (61.1%). Schools with larger proportions of rural students were more likely to include mention of agricultural health, yet scant attention was given to *any* rural focused content. There was no mention of *agricultural* health issues in 27.4% of the schools, and 54% of nursing faculty who completed the survey were not aware of the need for nurses with agricultural health expertise. Results suggested that when agricultural health topics are presented in class, student interest in the topic increased. Given the occupational hazards faced in agriculture and the region's economic dependence upon agriculture, increased attention should be focused on agricultural health content within nursing programs. Contact: dbreed@uky.edu.

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component of developing sustainable agricultural systems. Applying engineering solutions that maximize the positive impacts and minimize the negative impacts on those who work in agriculture is needed to meet changing societal expectations of U.S. agriculture. The Cooperative State Research Education and Extension Service and the National Institute for Occupational Safety and Health can be instrumental in maximizing the positive impacts on those who work in agriculture by facilitating research to practice agricultural safety and health programs through focused common goals and funding initiatives.

The land grant institutions are well positioned to provide leadership in research and extension to effectively address agricultural safety, health and security issues at all levels of the agricultural industry. A multi-state committee was charged with developing agricultural safety and health research and extension priorities for the land grant system. This committee of 18 land grant institutions published for the first time in 2003 the *National Land Grant Research and Extension Agenda for Agricultural Safety and Health*. The agenda includes 12 research and extension priority areas. A PDF version of this national agenda for action is available on the NASD database. A limited number of printed copies can be obtained by e-mail to: jwhite@csrees.usda.gov.

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Partnering With Extension
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nation. As part of the Center's R2P efforts, the train-the-trainer program will replicate the educational modules developed on skin cancer prevention, and include training with the Dermascan® unit. The American Farm Bureau Federation is also partnering with this effort. Additional information will be available to other Centers in the future.

Another future outreach R2P effort is also being planned for the immediate future. Through the Extension network and interested Centers, a national video on the need for rollover protective structures and seat belt use, developed and tested as a result of a GLCASH intervention project by PI Dr. Jim Helmkamp at West Virginia University and an award winning video producer, is being planned for distribution later in 2005. This will also assist in supporting the Agricultural Safety and Health Centers National Agricultural Tractor Safety Initiative.

Interested in working with Extension? The CSREES-USDA maintains a website for agricultural safety and health personnel in each state at land grant universities:

http://www.csrees.usda.gov/nea/ag_systems/part/workforce_part_states.html

I hope that our current efforts in 2005 and plans for the future have given you some food for thought on how you too can work with Extension. We at the Great Lakes Center hope that you continue to have a great productive summer!
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